



1009382

PART I. BACKGROUND

FACILITY NAME

RMI Sodium

FACILITY LOCATION

Ashtabula Ohio

RCRA ID NUMBER
TYPE OF PERMIT

OHD 000810 242

☒ Storage☐ Treatment☐ Disposal☐ Container☐ Tank☐ Injection Well☐ Tank☐ Surface Impoundment☐ Landfill☒ Waste Pile☒ Incinerator☐ Land Application☐ Surface Impoundment☐ Other☐ Surface Impoundment

PART II. REVIEW PACKAGE CONTENT

- ☒ Draft Permit w/Attachments
☐ Draft Public Notice (PMS Prepares this)
☒ Administrative Record, including
☒ Corrective Action Certification
☒ Screening for Environmental Significance
☒ Facility Management Plan (if applicable)
☒ (Other) Statement of Basis

PART III. CONCURRENCES

	INITIALS	DATE	AGREE	DISAGREE
1. TECH. PERMIT CONTACT	<u>YH in FPN</u>	<u>9/4/86</u>	(✓)	()
2. CHIEF, STATE TECHNICAL UNIT	<u>YH</u>	<u>9/4/86</u>	(✓)	()
3. TECHNICAL EXPERT (If applicable)	<u>Chico</u>	<u>9/9/86</u>	(✓)	()
4. SECTION CHIEF, TPS <u>Unit Chief, AU</u>	<u>LeBunn</u>	<u>9/9/86</u>	(✓)	()
5. SECTION CHIEF, AIS	<u>YH</u>	<u>9/10/86</u>	(✓)	()
6. ASST. REG. COUNSEL, (ORC)	<u>YH</u>	<u>9/11/86</u>	()	()
7. SECTION CHIEF SWERB (ORC)	<u>YH</u>	<u>9/11/86</u>	()	()
8. BRANCH CHIEF, SWERB (ORC)	<u>YH</u>	<u>9/11/86</u>	()	()
9. CHIEF, SOLID WASTE BRANCH	<u>YH</u>	<u>9/19/86</u>	(✓)	()

PART IV PUBLIC NOTICE

10. CHIEF, AUTHORIZATION AND
INFORMATION SECTION11. PUBLIC PARTICIPATION
SPECIALIST

Public Notice Date

Draft 5/28/96

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
HAZARDOUS WASTE MANAGEMENT PERMIT

Name of Permittee: RMI Company - Sodium Plant

Facility Location: Street Address: State Road and East 6th Street

City, State: Ashtabula, Ohio

EPA Identification Number: OHD 000 810 242

Effective Date: _____

Expiration Date: March 25, 1997

Authorized Activities:

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, (42 U.S.C. §6901, et seq.), and regulations promulgated thereunder by the United States Environmental Protection Agency (U.S. EPA) (codified in Title 40 of the Code of Federal Regulations (40 CFR)), modifications to the Federal portion of the RCRA permit are issued to RMI Company - Sodium Plant (hereinafter called the Permittee), for the facility RMI Company - Sodium Plant located in Ashtabula, Ohio.

Permit Approval

The Permittee must comply with all terms and conditions of the Federal portion of the RCRA permit. The Federal portion of the RCRA permit contains both the effective Federal permit conditions that became effective on March 25, 1987 and the permit conditions contained in this modification, as well as any previous modifications to the Federal portion of the RCRA permit.

This permit modification is based on the assumption that the information submitted in support of the permit modification is accurate. Any inaccuracies found in this information may be grounds for the termination, revocation and reissuance, or further modification of this permit (see 40 CFR 270.41, 270.42, and 270.43) and potential enforcement action. The Permittee must inform the U.S. EPA of any deviation from or changes in the information submitted in support of the modification as soon as the Permittee becomes aware of such deviation or changes.

Opportunity to Appeal:

Petitions for review must be submitted within 30 days after service of notice of the final permit modification decision. Any person who filed comments on the draft permit modification, or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit modification decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit modification may petition for

Draft 5/28/96

administrative review only to the extent of the changes from the draft permit modification to the final permit modification decision. The procedures for permit appeals are found in 40 CFR 124.19.

Effective Date:

This permit is effective as of (**45 days after signature**), unless a review is requested under 40 CFR 124.19, and shall remain in effect until March 25, 1997, unless revoked and reissued, or terminated (40 CFR 270.41, 270,.43), or continued in accordance with 40 CFR 270.51.

BY: _____
Norman R. Niedergang
Division Director
Waste, Pesticides, and Toxics Division

DATE: _____

V. CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS (SWMUs)

A. CORRECTIVE ACTION AT THE FACILITY

In accordance with Section 3004(u) of RCRA and the regulations promulgated pursuant thereto, the Permittee must institute Corrective Action as necessary to protect human health and the environment for all releases of hazardous waste(s) or hazardous constituent(s) from any solid waste management units (SWMUs) at the facility, regardless of the time at which waste was placed in such units.

B. CORRECTIVE ACTION BEYOND THE FACILITY BOUNDARY

In accordance with Section 3004(v) of RCRA and the regulations promulgated pursuant thereto, the Permittee must implement Corrective Action(s) beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Regional Administrator that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be addressed under the RCRA Facility Investigation, Corrective Measures Study, and Corrective Measures Implementation phases, as determined to be necessary on a case-by-case basis.

C. IDENTIFICATION OF SWMUs

The following SWMUs were investigated during the RFI:

Area A	Inactive landfill located at the south end of the site.
Area B	Fill area north of Area A and next to Area C.
Area C	Fill area north of Area A and next to Area B.
Area D	Former fill areas in the vicinity of Area E.
Area E	Active wastewater treatment ponds.
Area F	Fill areas west of Area E.
Area G	Fill area north of Area E.

As identified from the RFI, the following media are contaminated with various organic and inorganic constituents of concern (COCs):

<u>Media</u>	<u>Constituents of Concern</u>
Surficial soil	Arsenic, barium, cadmium, and lead.
Subsurface soil	Barium, cadmium, and lead.
Surface water	Barium and cadmium.
Groundwater	Barium and cadmium.
Sediments	Barium and cadmium.

Class 3 Permit Modification

Through corrective action investigations and evaluation it has been determined that soils, at limited depths and containing constituents above action levels, are the primary concern at the RMI Sodium site.

Area A is an inactive landfill with potential hazard constituents barium, cadmium, and lead due to previous deposits of cell bath and anode butt waste. Though no hazardous substances have been detected above action levels at this SWMU, additional monitoring wells, and a RCRA-type landfill cap will be constructed to enhance monitoring capabilities of the area.

Because they join each other and contained similar wastes, Areas B and C are combined into a single corrective action area. These units contain arsenic and cadmium above action levels and lead approaching action levels in the surficial soil. Cadmium is above action levels in the surface water. The presence of elevated levels of cadmium in the surface water is most likely due to erosion of surficial soils into the drainage ditch near Area B.

Area G contains arsenic above its action level in the surficial soil, and cadmium in soil 0.5 to 3.3 feet below ground surface. This area also contains elevated concentrations of barium and cadmium in the shallow groundwater. These concentrations in the groundwater are believed to be due to recharge of the groundwater from the wastewater treatment ponds, and from the *leaching* of subsurface soils or buried waste.

Contaminants in the wastewater treatment ponds (located at Area E) will be addressed when the ponds undergo RCRA closure after waste treatment activities at the thermal oxidation unit have been completed. No Further Action will occur at Areas D and F.

Attachment IX, Statement of Basis, identifies the SWMUs at this facility.

D. NEWLY IDENTIFIED SWMUs OR RELEASES

1. General Information

The Permittee shall notify the Regional Administrator, within 30 days of discovery, of the following information requirements for any new SWMU identified at the facility, in accordance with 40 CFR 270.14(d):

- a. The location of the unit on the site topographic map;
- b. Designation of the type of unit;
- c. General dimensions and structural description (supply any available drawings);
- d. When the unit was operated; and
- e. Specifications of all waste(s) that have been managed at the unit.

2. Release Information

The Permittee must submit to the Regional Administrator, within 30 days of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing SWMU.

E. CORRECTIVE ACTION FOR NEWLY IDENTIFIED SWMUs AND RELEASES

The Regional Administrator will review the information provided in Condition V.C. above, and may as necessary require further investigations or corrective measures. The Permittee shall submit a written RCRA Facility Investigation Workplan to the Regional Administrator within (45) days after written notification by the Regional Administrator that further investigation is necessary.

F. CORRECTIVE ACTION ACTIVITIES

1. Determination of No Further Action

a. SWMs Identified as No Further Action

Based on the results of the completed RFI and other relevant information, the Regional Administrator has determined that releases or suspected releases at Areas D and F, which were investigated do not pose a threat to human health and the environment. Therefore, Areas D and F, having been identified as areas where there are no releases of hazardous waste(s), including hazardous constituents, that pose a threat to human health and the environment require no further action.

b. Periodic Monitoring

A determination of no further action shall not preclude the Regional Administrator from requiring continued or periodic monitoring of air, soil, ground water, or surface water, if necessary to protect human health and the environment, when site-specific circumstances indicate that potential or actual releases of hazardous waste(s) including hazardous constituents are likely to occur.

c. Further Investigations

A determination of no further action shall not preclude the Regional Administrator from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates that a release or likelihood of a release from a SWMU at the facility is likely to pose a threat to human health or the environment. In such a case, the Regional Administrator shall initiate a modification to the Corrective Action Schedule of Compliance to rescind the determination made in accordance with Permit Condition V.F.1.a. Additionally, the Regional Administrator may determine that there is insufficient information on which to base a determination, and may require the

Permittee to perform additional investigations as needed to generate the needed information.

2. Corrective Measures Implementation (CMI)

a. Proposed Remedy

The remedy proposed by U.S. EPA is a combination of Alternatives 4E and 5B from the CMS, with additional action not addressed in the CMS. Attachment IX provides additional information on the proposed remedy. The components of the proposed remedy include the following:

- i. Removal of contaminated soil from Areas B, C and G;
- ii. Offsite disposal of contaminated soil (approximately 7,850 cubic yards) at an approved landfill;
- iii. Confirmatory sampling along the periphery of each excavation to determine if the lateral extent of contamination has been removed (based upon action levels);
- iv. Confirmatory sampling along the base of the excavation to determine if the vertical extent of contamination has been removed (based upon action levels);
- v. Construction of a landfill cap over the entire Area A (inactive landfill). The cap is to meet RCRA standards;
- vi. Installation of additional monitoring wells surrounding Area A (Figure 11);
- vii. Implementation of a regular monitoring program to ensure that groundwater in the unconfined till is not being impacted by the landfill. If during the monitoring program any constituents are found in excess of the action levels, this will trigger additional corrective action by RMI Sodium at the landfill;
- viii. Application of land use restriction in the property deed for Area A; and
- ix. No further action at Areas D and F.

b. Evaluation Criteria

The criteria used to evaluate the proposed remedy include:

- i. Four general standards for corrective measures:

- aa. Overall protection of human health and the environment;
 - bb. Attain media cleanup standards;
 - cc. Control the sources of releases; and
 - dd. Comply with standards for management of wastes.
- ii. The five specific selection decision factors are as follows:
 - aa. Long-term reliability and effectiveness;
 - bb. Reduction of toxicity, mobility, or volume of wastes;
 - bb. Short-term effectiveness;
 - cc. Implementability; and
 - dd. Cost.
- c. Rationale for Selecting the Proposed Remedy
 - i. Discussion of SWMUs

A discussion of the rationale used to develop the proposed remedy is presented in the following paragraphs. This discussion begins with a description of how each SWMU will be affected by the proposed remedy.

 - aa. Area A: Corrective action at Area A will include the construction of a RCRA-type cap over the landfill, and the implementation of a groundwater monitoring system to ensure that future releases will not occur.
 - bb. Areas B and C: These Areas are grouped together because they are located adjacent to each other and contain similar wastes. During the risk assessment it was determined that the noncarcinogenic index under the future residential scenario is 1.7. This level is greater than the level of 1, defined by U.S. EPA as the level indicating a need for concern. The estimated volume of soil to be removed is 1,357 cubic yards. This is based on an anticipated excavation depth of six inches. This also includes an estimated 100 cubic yards of sediment to be removed from a ditch immediately east of Area B.
 - cc. Area D: This area contains lead in shallow soils (3 to 6.5 feet). Area D, three localized fill areas, is believed to have been used for the placement of wastes, including cell bath wastes. The southernmost segment of Area D is believed to be the only

waste area of the original three that remains. This is due to the excavation of material from the two northernmost segments for the construction of the facility's wastewater treatment ponds (Area E).

Risks for lead were not quantified in RMI Sodium's risk assessment. However, the level of lead in Area D (37.4 ppm) is less than the CERCLA/RCRA lead screening level for residential soils (400 ppm).

Barium was found in the unconfined water bearing zone downgradient, at a level of 1200 ppb in well 6-S; this level is greater than U.S. EPA action level of 1000 ppb. It has been determined, for human health risk purposes, that groundwater is not a complete migration pathway.

Therefore, no further corrective action is necessary at Area D.

- dd. Area E: This area consists of the wastewater treatment ponds, which is currently in operation under a Federal RCRA Part B permit. When the ponds are taken out of service, closure will be conducted under RCRA regulations and specifications. Any corrective action activities that are necessary will be conducted during closure.
- ee. Area F: This area contains cell bath waste, anode butts, cell bricks, and construction debris. Constituents of concern identified in surficial soils were lead and arsenic. No further action is required at Area F because the residential carcinogenic risk level is 3.7×10^{-5} , the noncarcinogenic hazard index due to arsenic is 0.16, and the lead level of 87.5 ppm is well below the 400 ppm screening level.
- ff. Area G: Area G also contains cell bath waste, anode butts, cell bricks, and construction debris. Constituents of concern identified in surficial soils were lead (29.1 ppm) and arsenic (18.5 ppm). Constituents of concern identified in shallow soils to an approximate depth of 3.3 feet were lead (189.9 ppm) and cadmium (85.2 ppm). The arsenic and cadmium levels are higher than action levels. The residential noncarcinogenic hazard level of 0.55 is below the limit of 1.0 and lead levels do not exceed 400 ppm. However, it has been decided that because lead, cadmium, and arsenic all exist in this area at moderate to significant levels, Area G will be subject to corrective action.

The estimated amount of contaminated soil to be removed from Area G is 6,482 cubic yards. The anticipated depth of excavation is 3.5 feet.

ii. Discussion of selection criteria

Given the information just provided on each SWMU, the proposed remedy can be evaluated by the five selection criteria as discussed below.

- aa. Long-term reliability and effectiveness. Contaminated soils from Areas B, C and G will be completely removed from the site and disposed of in a regulated landfill. This will allow industrial and residential activities to be conducted on this site without health risks from current contamination.

Construction of a landfill cap over Area A that meets RCRA requirements, installation of additional monitoring wells, following a regular monitoring schedule, and writing deed restrictions for Area A will help ensure that there will be long-term protection from any future environmental problems caused by the landfill.

- bb. Reduction of toxicity, mobility or volume of wastes. No aspects of the proposed remedy will reduce the toxicity or volume of the contaminants. However, all aspects will reduce the mobility of constituents from Areas A, B, C and G. This will be accomplished because the contaminated materials will be confined in controlled landfills.

With contaminated soils removed from Area B, contamination of surface water in the drainage ditch nearby should cease.

No reduction of mobility will be experienced by the constituents of concern in Areas D, E and F.

- cc. Short-term effectiveness. Short-term effectiveness will be greatest at Area B where erosion of contaminated soil will cease.

Any potential risk at Area A will improve after the cap is placed on the landfill.

The highest short term risk will occur in the form of dust created by excavating contaminated soils, transfer of soil to trucks, transportation of soil, and dumping at an offsite landfill. Most risk will be experienced by remedial workers on site and at the offsite landfill. These risks should be reduced through the use of workers trained in the use of procedures for hazardous waste sites.

- dd. Implementability. The proposed remedy is more complex than any of the previously mentioned alternatives because of the cap construction and the installation of monitoring wells. One advantage over Alternatives 4A through 4E (as presented in the CMS), is that the existing landfill topsoil will not have to be removed, piled and replaced. The new cap will be placed over the existing cover as long as proper compaction can be achieved.

The material being transported to an offsite landfill may require further material characterization.

- ee. Cost. The total cost of the proposed remedy is \$1,356,685.00. This cost is greater than all the evaluated alternatives, with the exception of Alternative 5A. The U.S. EPA's decision not to require a synthetic liner in the landfill (Area A) cap reduces the cost of the remedy if RMI Sodium chooses not to include a synthetic liner in the cap design.

a. Permit Modification

The Regional Administrator initiated this permit modification, as provided by 40 CFR 270.41, to require implementation of the corrective measure selected.

b. Financial Assurance

As part of the permit modification of this permit to incorporate CMI, the Permittee shall provide financial assurance in the amount specified by the Regional Administrator for necessary corrective action activities as required by 40 CFR 264.101(b) and (c).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Name of Permittee: RMI Company - Sodium Plant
Facility Location: State Road and East 6th Street, Ashtabula, Ohio
EPA identificaiton Number OHD 000810242
Effective Date: Thirty (30) days after service of notice unless review
requested under 40 CFR 124.19
Expiration Date: Ten (10) years after the effective date

Authorized Activities

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC §6901 et seq., commonly known as RCRA), the 1984 Hazardous and Solid Waste Amendments (HSWA), and regulations promulgated thereunder by the U.S. Environmental Protection Agency (U.S. EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations), a permit is issued to RMI Company-Sodium Plant (hereafter called the Permittee), to operate a hazardous waste storage and treatment facility located in Ashtabula, Ohio, on State Road and East 6th Street at latitude 41-degrees 54'02" and longitude 80 degrees 46' 21". You are authorized to conduct the following hazardous waste management activities:

<input checked="" type="checkbox"/> Storage:	<input checked="" type="checkbox"/> Treatment:
<input type="checkbox"/> Container	<input type="checkbox"/> Tank
<input type="checkbox"/> Tank	<input type="checkbox"/> Surface Impoundment
<input checked="" type="checkbox"/> Waste Pile	<input checked="" type="checkbox"/> Incinerator
<input type="checkbox"/> Surface Impoundment	<input type="checkbox"/> Other
<input type="checkbox"/> HSWA	

Applicable Regulations:

The conditions of this permit were developed in accordance with the applicable provisions of 40 CFR Part:

<input checked="" type="checkbox"/> 261	<input checked="" type="checkbox"/> 264, Subpart G	<input checked="" type="checkbox"/> 264, Subpart L
<input checked="" type="checkbox"/> 262	<input checked="" type="checkbox"/> 264, Subpart H	<input type="checkbox"/> 264, Subpart M
<input checked="" type="checkbox"/> 264, Subpart A-E	<input type="checkbox"/> 264, Subpart I	<input type="checkbox"/> 264, Subpart N
<input type="checkbox"/> 264, Subpart F	<input type="checkbox"/> 264, Subpart J	<input checked="" type="checkbox"/> 264, Subpart O
<input checked="" type="checkbox"/> HSWA	<input type="checkbox"/> 264, Subpart K	<input checked="" type="checkbox"/> 270

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260 through 264 and 270 and 124 as specified in the permit, and relevant provisions of HSWA. Applicable regulations are those which are in effect on the date of issuance of this permit (See 40 CFR §270.32(c)).

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated November 7, 1985, and any subsequent amendments (hereafter referred to as the application) is accurate and that the facility is constructed and will be operated as specified in the application. Any inaccuracies found in this information may be grounds for the termination or modification of this permit, in accordance with 40 CFR §270.41, §270.42 and §270.43, and potential enforcement action. The Permittee must inform U.S. EPA of any deviation from or changes in the information in the application or in the permittee's knowledge of solid waste management units and/or releases which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of _____, and shall remain in effect until _____ unless revoked and reissued, or terminated (40 CFR §270.41 and .43 and HSWA) or continued in accordance with 40 CFR §270.51.

Issued this _____ day of _____

by _____
Basil G. Constantelos, Director
Waste Management Division

RMI Company-Sodium PlantPERMIT INDEX

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STATEMENT OF BASIS

RMI Company - Sodium Plant
OHD 000810242

This is a statement of the basis for the Draft Hazardous Waste Permit prepared under the Resource Conservation and Recovery Act (RCRA) for the subject facility. It briefly describes the derivation of the conditions of the draft permit and the reasons for them. Under 40 CFR 124.7 (Title 40 of the Code of Federal Regulations, Section 124.7), the Statement of Basis is sent to the applicant and to any other person who requests it.

A. FACILITY DESCRIPTION

1. RCRA Activities

RMI Company - Sodium Plant produces sodium and chlorine by electrolysis of sodium chloride. This production process generates three types of hazardous wastes: cell bath waste contaminated with heavy metals, a reactive sodium/calcium sludge, and waste sulfuric acid. This facility is a hazardous waste treatment and storage facility. This draft permit covers storage of the cell bath waste in an enclosed waste pile prior to being shipped to an off-site landfill, and incineration of the reactive sodium/calcium wastes.

This permit does not cover on-site neutralization of the waste sulfuric acid. This treatment process is exempt from RCRA permit requirements as provided under 40 CFR §264.1(g)(6).

2. Permit Actions Other Than RCRA

a. Water

RMI-Sodium Plant has an NPDES Permit #3IE00012*AD

b. Air

RMI-Sodium Plant has the following PSD permit numbers: 0204010204 P001, 0204010204 P002, 0204010204 B004, 0204010204 B005.

c. Other Federal Acts Considered

RMI Company-Sodium Plant will not require other permits to satisfy any other Federal acts. The facility will not have any adverse effect on the historical, architectural, archeological or cultural characteristics of the properties either listed or eligible for listing on the National Register for Historical Places.

B. PERMIT APPLICATION

The permit application cited herein is the November 7, 1985 permit application as amended April 10, 1986, and August 20, 1986.

C. PURPOSE OF THE PERMITTING PROCESS

The purpose of the permitting process is to afford the United States Environmental Protection Agency (U.S. EPA), interested citizens and other governmental agencies the opportunity to evaluate the ability of the applicant to comply with the applicable hazardous waste management requirements under the Resource Conservation and Recovery Act (RCRA). The U.S. EPA is required to prepare a draft permit which sets forth in one concise document all the applicable requirements with which the Agency intends to require the Permittee to comply during the ten year duration of the permit.

D. PROCEDURES FOR REACHING A FINAL DECISION

Under Section 7004(b) of RCRA and 40 CFR §124.10, the public is given 45 days to review the application and comment on the draft permit conditions prior to U.S. EPA taking any final permitting action on the application for a hazardous waste management permit. The comment period will begin on the date of publication of the public notice in a major local newspaper of general circulation. When the Regional Administrator of the U.S. EPA makes his final permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final permit decision. If none of the comments received requested a change in the draft permit conditions, the permit will become effective immediately upon issuance of the final permit. If comments received during comment period requested changes in the draft permit conditions the the final permit will become effective 30 days after service of notice of the decision or at a later date if review is requested under 40 CFR §124.19.

The issuance of a Hazardous Waste Permit will be coordinated by both U.S. EPA and the Ohio Environmental Protection Agency (OEPA). At this time, each Agency has regulations which require a permit to be issued for all facilities which treat, store, or dispose of hazardous waste. If the State receives authorization, it will assume the administration of all or a portion of the Federal hazardous waste permitting program and the corresponding portions of this permit.

E. BRIEF SUMMARY OF THE PERMIT CONDITIONS

This section provides a brief summary of the permit conditions in the draft permit. The column titled "Regulation" provides the regulatory authority for the permit condition specified in the column titled "Permit Condition."

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
I	STANDARD CONDITIONS	
I.A	Effect of Permit	270.4 270.30(g)
I.B	Permit Actions	270.30(f) 270.41 270.42 270.43 264.112 264.343(d)
I.C	Severability	Standard Practice
I.D.1	Duty to Comply	270.30(a)
I.D.2	Duty to Reapply	270.30(b) 270.10(h)
I.D.3	Permit Expiration	270.51
I.D.4	Need to Halt or Reduce Activity Not a Defense	270.30(c)
I.D.5	Duty to Mitigate	270.30(d)
I.D.6	Proper Operation and Maintenance	270.30(e)
I.D.7	Duty to Provide Information	264.74(a) 270.30(h)
I.D.8	Inspection and Entry	270.30(i)
I.D.9	Monitoring and Records	270.30(j)
I.D.10	Reporting Planned Changes	270.30(1)(1)
I.D.11	Certification of Construction or Modification	270.30(1)(2)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
I.D.12	Anticipated Noncompliance	270.30(1)(2)
I.D.13	Transfer of Permits	270.30(1)(3) ; 270.40 264.12(c)
I.D 14	Compliance Schedules	270.30(1)(5) 270.33
I.D.15	Twenty-Four Hour Reporting	264.56(d),(i), and (j) 270.30(1)(6)
I.D.16	Other Noncompliance	270.30(1)(10)
I.D.17	Other Information	270.31(1)(11)
I.E	Signatory Requirement	270.11 270.30(k)
I.F	Confidential Information	270.12
I.G	Documents to be Submitted Prior to Operation	
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II.J.3	Amendments to Contingency Plan	264.54
II.J.4	Emergency Coordinator	264.55
II.K	Manifest System	264.71 264.72 264.76 270.30(1)(7) 270.30(1)(8)
II.L.1	Operating Record	264.73
II.L.2	Biennial Report	264.75 270.30(1)(g)
II.M.1	Closure Performance Standard	264.111
II.M.2	Amendment to Closure Plan	264.112(b)
II.M.3	Notification of Closure	264.112(c)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
II.M.4	Time Allowed for Closure	264.113
II.M.5	Disposal or Decontamination of Equipment	264.114
II.M.6	Certification of Closure	264.15
II.N	Cost Estimate for Facility Closure	264.142
II.O	Cost Estimate for Corrective Action	264.101
II.P	Financial Assurance for Facility Closure	264.143 264.147 264.148
II.Q	Financial Assurance and Documentation Required for Corrective Action	
II.R	Liability Requirements	264.147
II.S	Incapacity of Owners, or Operators, Guarantors, or Financial Institutions	264.148
II.T	Financial Assurance and Documentation	264.143 264.149 264.151
II.U	Waste Minimization Plan	264.73(b)(a)
III	STORAGE IN WASTE PILE	
III.A	Waste Identification	270.13(i)
III.B	Design and Operating Requirements	264.250(c)
III.C	Exemption from Subpart F Ground Water Protection Requirements	264.250(c)
III.D	Monitoring and Inspection	264.254
III.E	Special Requirements for Ignitable or Reactive Waste	264.256

III.F	Special Requirements for Incompatible Wastes	264.257
III.G	Closure	264.258
IV.	Incineration	
IV.A	Partial Exemption	264.340
IV.B	Waste Identification	264.341
IV.C	Closure	264.351
V.	Corrective Action for Solid Waste Management Units	264.101

STATEMENT OF BASIS

RMI Company - Sodium Plant
OHD 000810242

This is a statement of the basis for the Draft Hazardous Waste Permit prepared under the Resource Conservation and Recovery Act (RCRA) for the subject facility. It briefly describes the derivation of the conditions of the draft permit and the reasons for them. Under 40 CFR 124.7 (Title 40 of the Code of Federal Regulations, Section 124.7), the Statement of Basis is sent to the applicant and to any other person who requests it.

A. FACILITY DESCRIPTION

1. RCRA Activities

RMI Company - Sodium Plant produces sodium and chlorine by electrolysis of sodium chloride. This production process generates three types of hazardous wastes: cell bath waste contaminated with heavy metals, a reactive sodium/calcium sludge, and waste sulfuric acid. This facility is a hazardous waste treatment and storage facility. This draft permit covers storage of the cell bath waste in an enclosed waste pile prior to being shipped to an off-site landfill, and incineration of the reactive sodium/ calcium wastes.

The incinerator at RMI-Sodium Plant is a 14 ft. x 13 ft. x 11 ft. high enclosure, equipped with exhaust and air pollution control equipment. Burning of the reactive sodium/ calcium waste is accomplished in this enclosure using natural gas torches. The maximum oxidation rate is 1,000 pounds in eight hours. However, the unit will only be operated periodically, not on a daily basis. The quantity of air going to the catenary grid scrubber is maintained at 8,000 cubic feet per minute during operation. The incinerator is exempt from all incinerator permit requirements, except for the performance of a waste analysis and preparation of a closure plan in accordance with 40 CFR 264.340(c). The incinerator qualifies for the regulatory exemption for two reasons:

1. the hazardous wastes to be burned are hazardous only because of the reactivity characteristic, and
2. the wastes to be burned contain insignificant concentrations of hazardous constituents and do not generate toxic gases.

This permit does not cover on-site neutralization of the waste sulfuric acid. This treatment process is exempt from RCRA permit requirements as provided under 40 CFR §264.1(g)(6).

2. Permit Actions Other Than RCRA

a. Water

RMI-Sodium Plant has an NPDES Permit #3IE00012*AD

b. Air

RMI-Sodium Plant has the following PSD permit numbers: 0204010204 P001, 0204010204 P002, 0204010204 B004, 0204010204 B005.

c. Other Federal Acts Considered

RMI Company-Sodium Plant will not require other permits to satisfy any other Federal acts. The facility will not have any adverse effect on the historical, architectural, archeological or cultural characteristics of the properties either listed or eligible for listing on the National Register for Historical Places.

B. PERMIT APPLICATION

The permit application cited herein is the November 7, 1985, permit application as amended April 10, 1986, and August 20, 1986.

C. PURPOSE OF THE PERMITTING PROCESS

The purpose of the permitting process is to afford the United States Environmental Protection Agency (U.S. EPA), interested citizens and other governmental agencies the opportunity to evaluate the ability of the applicant to comply with the applicable hazardous waste management requirements under the Resource Conservation and Recovery Act (RCRA). The U.S. EPA is required to prepare a draft permit which sets forth in one concise document all the applicable requirements with which the Agency intends to require the Permittee to comply during the ten year duration of the permit.

D. PROCEDURES FOR REACHING A FINAL DECISION

Under Section 7004(b) of RCRA and 40 CFR §124.10, the public is given 45 days to review the application and comment on the draft permit conditions prior to U.S. EPA taking any final permitting action on the application for a hazardous waste management permit. The comment period will begin on the date of publication of the public notice in a major local newspaper of general circulation. When the Regional Administrator of the U.S. EPA makes his final permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final permit decision. If none of the comments received requested a change in the draft permit conditions, the permit will become effective immediately upon issuance of the final permit. If com-

ments received during the comment period requested changes in the draft permit conditions, the the final permit will become effective 30 days after service of notice of the decision or at a later date, if review is requested under 40 CFR §124.19.

The issuance of a Hazardous Waste Permit will be coordinated by both U.S. EPA and the Ohio Environmental Protection Agency (OEPA). At this time, each Agency has regulations which require a permit to be issued for all facilities which treat, store, or dispose of hazardous waste. If the State receives authorization, it will assume the administration of all or a portion of the Federal hazardous waste permitting program and the corresponding portions of this permit.

E. BRIEF SUMMARY OF THE PERMIT CONDITIONS

This section provides a brief summary of the permit conditions in the draft permit. The column titled "Regulation" provides the regulatory authority for the permit condition specified in the column titled "Permit Condition."

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
I	STANDARD CONDITIONS	
I.A	Effect of Permit	270.4 270.30(g)
I.B	Permit Actions	270.30(f) 270.41 270.42 270.43 264.112 264.343(d)
I.C	Severability	Standard Practice
I.D.1	Duty to Comply	270.30(a)
I.D.2	Duty to Reapply	270.30(b) 270.10(h)
I.D.3	Permit Expiration	270.51
I.D.4	Need to Halt or Reduce Activity Not a Defense	270.30(c)
I.D.5	Duty to Mitigate	270.30(d)
I.D.6	Proper Operation and Maintenance	270.30(e)
I.D.7	Duty to Provide Information	264.74(a) 270.30(h)
I.D.8	Inspection and Entry	270.30(i)
I.D.9	Monitoring and Records	270.30(j)
I.D.10	Reporting Planned Changes	270.30(1)(1)
I.D.11	Certification of Construction or Modification	270.30(1)(2)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
I.D.12	Anticipated Noncompliance	270.30(1)(2)
I.D.13	Transfer of Permits	270.30(1)(3) 270.40 264.12(c)
I.D.14	Compliance Schedules	270.30(1)(5) 270.33
I.D.15	Twenty-Four Hour Reporting	264.56(d),(i), and (j) 270.30(1)(6)
I.D.16	Other Noncompliance	270.30(1)(10)
I.D.17	Other Information	270.31(1)(11)
I.E	Signatory Requirement	270.11 270.30(k)
I.F	Confidential Information	270.12
I.G	Documents to be Submitted Prior to Operation	
I.H	Documents to be Maintained at Facility Site	264.13(b) 264.53(a) 264.122(a) 264.142(a) 264.16(d) 264.73 264.15(b)
II.	GENERAL FACILITY CONDITIONS	
II.A	Design and Operation of Facility	264.31
II.B	Required Notice	264.12
II.C	General Waste Analysis	264.13
II.D	Security	264.14

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
II.E	General Inspection Requirements	264.15
II.F	Personnel Training	264.16
II.G	General Requirements for Ignitable, Reactive, or Incompatible Waste	264.17
II.H	Location Standards	
II.I.1	Required Equipment	264.32
II.I.2	Testing and Maintenance of Equipment	264.33
II.G.3	Access to Communications or Alarm Systems	264.34
II.G.4	Required Aisle Space	264.35
II.G.5	Arrangements with Local Authorities	264.37
II.J.1	Implementation of Contingency Plan	264.51
II.H.2	Copies of Contingency Plan	264.53
II.J.3	Amendments to Contingency Plan	264.54
II.J.4	Emergency Coordinator	264.55
II.K	Manifest System	264.71 264.72 264.76 270.30(1)(7) 270.30(1)(8)
II.L.1	Operating Record	264.73
II.L.2	Biennial Report	264.75 270.30(1)(g)
II.M.1	Closure Performance Standard	264.111
II.M.2	Amendment to Closure Plan	264.112(b)
II.M.3	Notification of Closure	264.112(c)

<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
II.M.4	Time Allowed for Closure	264.113
II.M.5	Disposal or Decontamination of Equipment	264.114
II.M.6	Certification of Closure	264.15
II.N	Cost Estimate for Facility Closure	264.142
II.O	Cost Estimate for Corrective Action	264.101
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II.Q	Financial Assurance and Documentation Required for Corrective Action	
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<u>Permit Condition</u>	<u>Subject</u>	<u>Regulation (40 CFR)</u>
III.F	Special Requirements for Incompatible Wastes	264.257
III.G	Closure	264.258
IV.	Incineration	
IV.A	Partial Exemption	264.340
IV.B	Waste Identification	264.341
IV.C	Closure	264.351
V.	Corrective Action for Solid Waste Management Units	264.101

Representative samples of the following waste streams will be analyzed annually or at the time of a change in the process, or in the quality of the feedstock, by the method described above in order to characterize the waste:

- (1) Sodium Product
- (2) Sodium/Calcium Sludge from a "Container"
- (3) Sodium/Calcium Sludge from a "Container"

EPA

- 1) Manual of Methods for the Chemical Analyses of Water and Wastes
600/4-79-020, Revised April 1984.
- 2) SW-846

Since the samples are diluted to a 20:1 ratio, the total metal concentration in a sample can be calculated by multiplying the concentrations in the metal methylene solution by a factor of 20.

There is no need to analyze these waste streams for any other hazardous constituents listed in Appendix VIII of 40 CFR 261 because none of these other constituents are used in the generation of sodium/calcium wastes.